

**PRODUCTION OF XYLOSE FROM OIL PALM FROND FIBRE BY ACID
HYDROLYSIS**

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UNIVERSITI MALAYSIA PAHANG**

**PRODUCTION OF XYLOSE FROM OIL PALM FROND FIBRE BY ACID
HYDROLYSIS**

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Thesis is submitted in partial fulfilment of the requirements
for the award of the degree of
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SUPERVISOR'S DECLARATION

I hereby declare that I have checked this thesis and in my opinion, this thesis is adequate in terms of scope and quality for the award of the degree of Bachelor of Chemical Engineering.

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Date : 15 DECEMBER 2016

STUDENT'S DECLARATION

I hereby declare that the work in this thesis is my own except for quotations and summaries which have been duly acknowledged. The thesis has not been accepted for any degree and is not concurrently submitted for award of other degree

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This thesis is dedicated to my father, Mr. Maniarasan Gopal and my mother Mrs.
Puvanesvari Velappuly

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LIST OF SYMBOLS

M	Molarity
°C	Degree Celsius

LIST OF ABBREVIATIONS

MPOB	Malaysian Palm Oil Board
OPFF	Oil Palm Frond Fibre
EFB	Empty Fruit Bunches
OPT	Oil Palm Trunk
POME	Palm Oil Mill Effluent
H ₂ SO ₄	Sulphuric Acid
HCl	Hydrochloric Acid
NaOH	Sodium Hydroxide
TRS	Total Reducing Sugar
SEM	Scanning Electron Microscope Analysis
TGA	Thermogravimetric Analysis
FTIR	Fourier transform infra-red spectrometry
DNS	3,5-Dinitrosalicylic Acid
OD	Optical Density